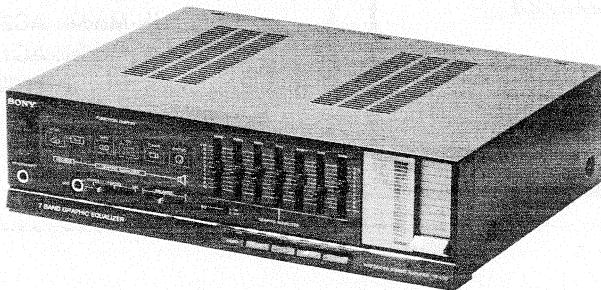


TA-V50

SERVICE MANUAL

AEP Model
UK Model
E Model



TA-V50 IS AMPLIFIER UNIT OF "LBT-V50W".

SPECIFICATIONS

Continuous RMS power output (AEP, G-AEP, UK model)

50 + 50 watts
(6 ohms, at 1 kHz, 0.5% THD)
40 + 40 watts
(6 ohms, 40 Hz - 20 kHz, 0.5% THD)

Music power output (E model)

160 W (6 ohms, 5% THD)

Peak music power output (E model)

320 W (6 ohms)

Inputs	Sensitivity	Impedance
PHONO (phono jacks)	2 mV	50 kilohms
CD, VIDEO (AUDIO IN) (phono jacks)	150 mV	50 kilohms
MIC (phone jack)	2 mV	20 kilohms

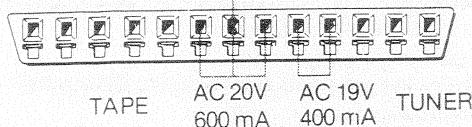
Outputs

HEADPHONES (stereo phone jack)	Accepts headphones of 8 ohms or more
SPEAKER	Accepts speakers of 6 to 16 ohms

SYSTEM CONTROL 1 terminal (13-pin)

SYSTEM CONTROL 2 terminal (13-pin)

CENTER



Frequency response

PHONO: RIAA curve ± 0.5 dB

CD, VIDEO (AUDIO IN):

15 Hz - 50 kHz $^{+0}_{-3}$ dB

MIC: 100 Hz - 10 kHz $^{+0}_{-6}$ dB



Power requirements: AEP model: 220V ac, 50/60Hz
UK model: 240V ac, 50/60Hz
E model: 120, 220 or 240V ac
adjustable, 50/60Hz

Power consumption: AEP model: 110 watts
UK model: 230 watts
E model: 110 watts
AEP model: 2 unswitched, 100 watts max.
UK model: 2 switched, 100 watts max.
E model: 2 unswitched, 100 watts max.

Dimensions: Approx. 355x98x290 mm (w/h/d)
(14x4 $\frac{1}{8}$ x9 $\frac{7}{8}$ inches)

Weight: incl. projecting parts and controls
Approx. 5.8 kg (11 lb 15 oz) net

Design and specifications subject to change without notice.

SAFETY-RELATED COMPONENT WARNING!!

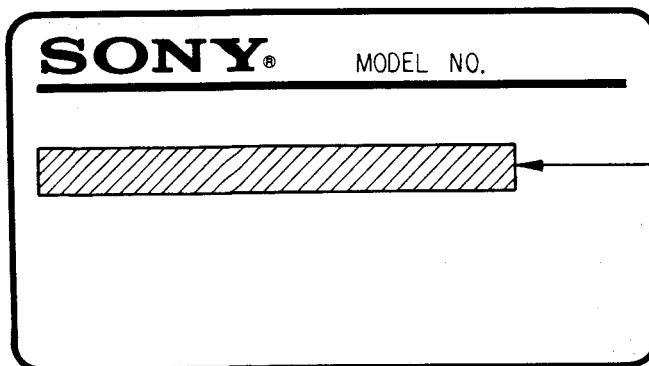
COMPONENTS IDENTIFIED BY SHADING AND MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

INTEGRATED STEREO AMPLIFIER
SONY[®]

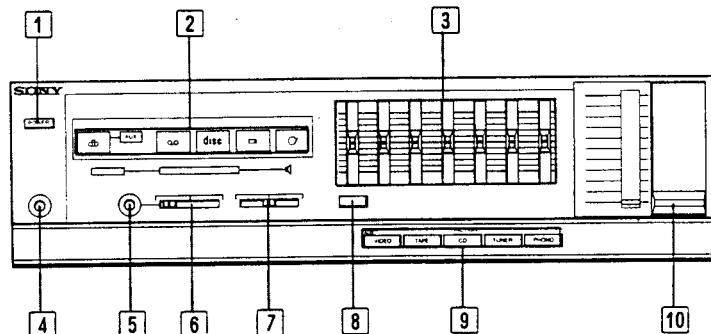
AUD

MODEL IDENTIFICATION

— Specification Label —



AEP, G-AEP Model: AC220V 50/60Hz 110W
 UK Model: AC240V 50/60Hz 230W
 E Model: AC120/220/240V 50/60Hz
 110W

FUNCTION OF CONTROLS**[1] POWER switch**

Press the switch (□ ON) to turn on the power of the stereo system. To turn it off, press the switch again (□ OFF).

[2] FUNCTION indicators

The indicator lights to show the input source in use.

[3] GRAPHIC EQUALIZER controls

To equalize the listening or recording sound, slide each control upwards to increase the level of the frequency band, and downwards to decrease the level.

100 Hz: Use to boost or cut the bass.

250 Hz: Use to adjust the middle and low frequency range.

500 Hz: Use to adjust the middle frequency range.

1 kHz: Use to provide more presence of vocals.

3 kHz: Use to adjust the brightness of sound.

6 kHz: Use to adjust the middle and high frequency range.

14 kHz: This control effects general treble. Slide downwards to reduce high frequency noise, such as tape hiss.

To record or listen to the sound with the original tone quality, set all the controls at their center positions.

[4] HEADPHONES jack (stereo phone jack)**[5] MIC (microphone) jack (phone jack)**

Connect a microphone for microphone mixing.

[6] MIXING control

Adjusts the balance between the volume of the microphone and the program source. Slide the control towards MIC to increase microphone volume, and towards SOURCE to increase source volume. When not in use for microphone mixing, slide this control fully to SOURCE.

[7] BALANCE control

Adjusts the balance of the left and right channel output levels.

[8] GRAPHIC EQUALIZER switch

Depress this switch (□ ON) to activate the graphic equalizer controls. Press it again (□ OFF) to obtain the original tone quality.

[9] FUNCTION select buttons

Press the desired program source button.

VIDEO/AUX: For video programs or another source connected to VIDEO inputs.

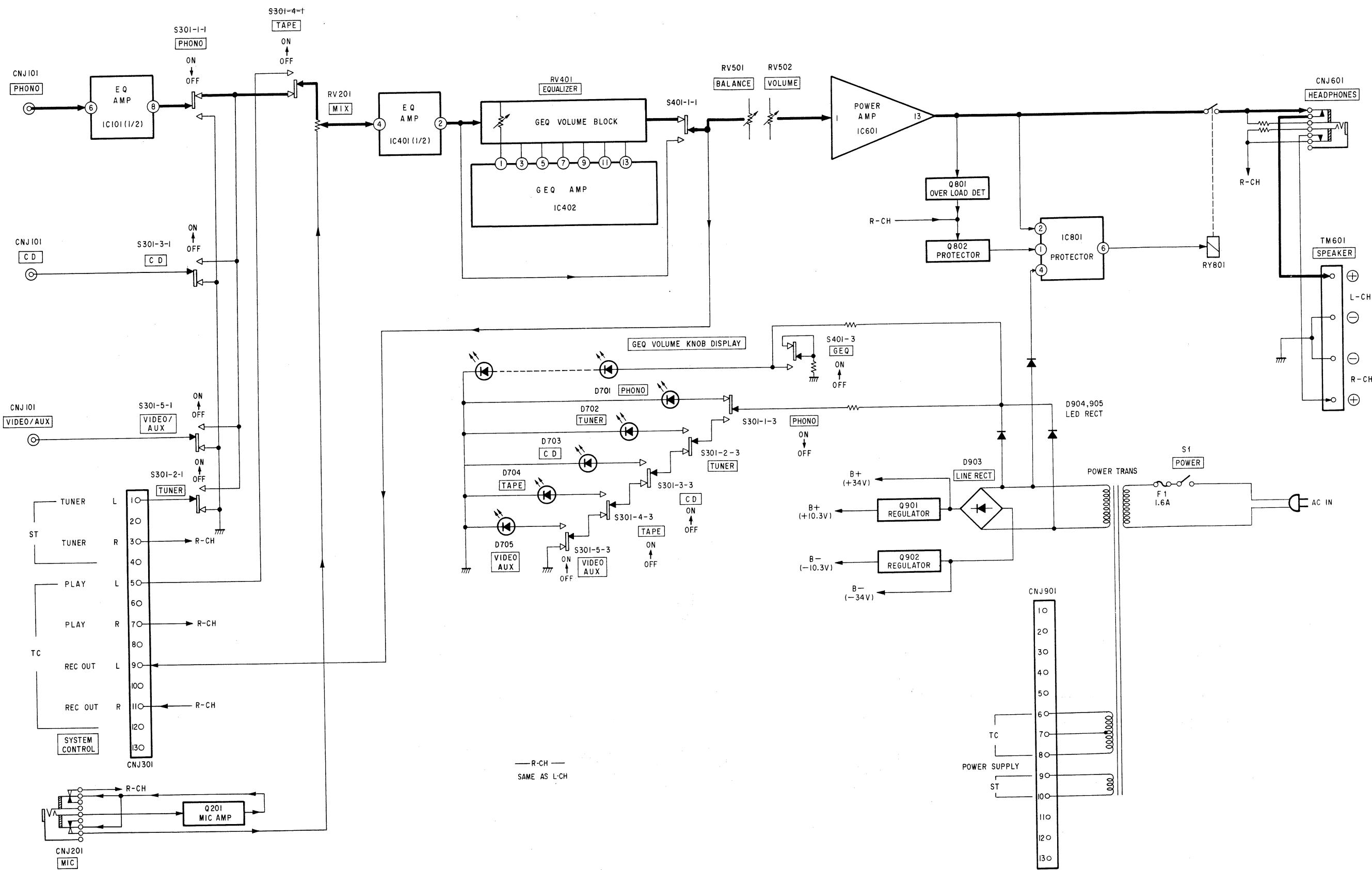
TAPE: For the tape programs.

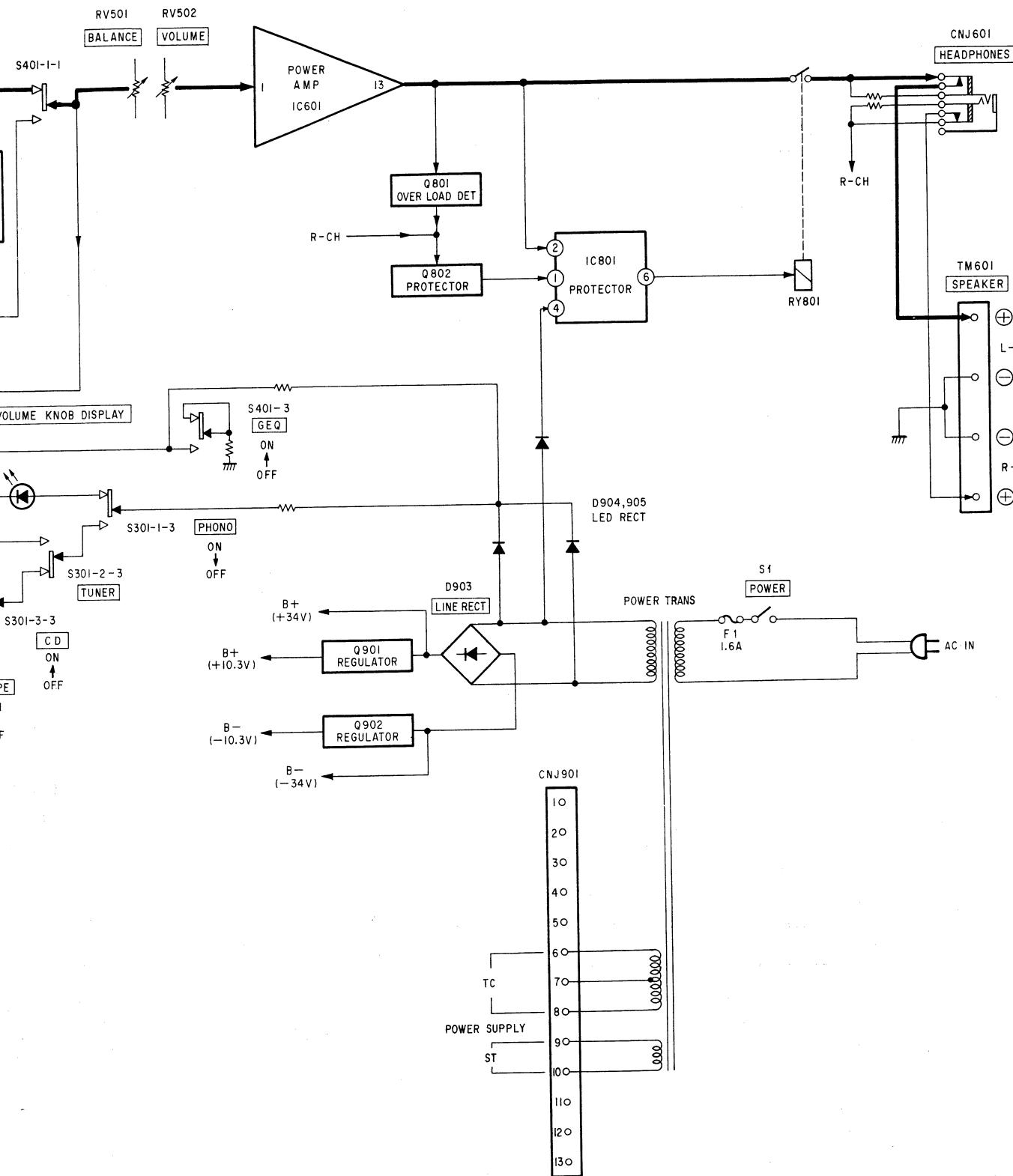
CD: For the programs connected to CD inputs.

TUNER: For radio programs.

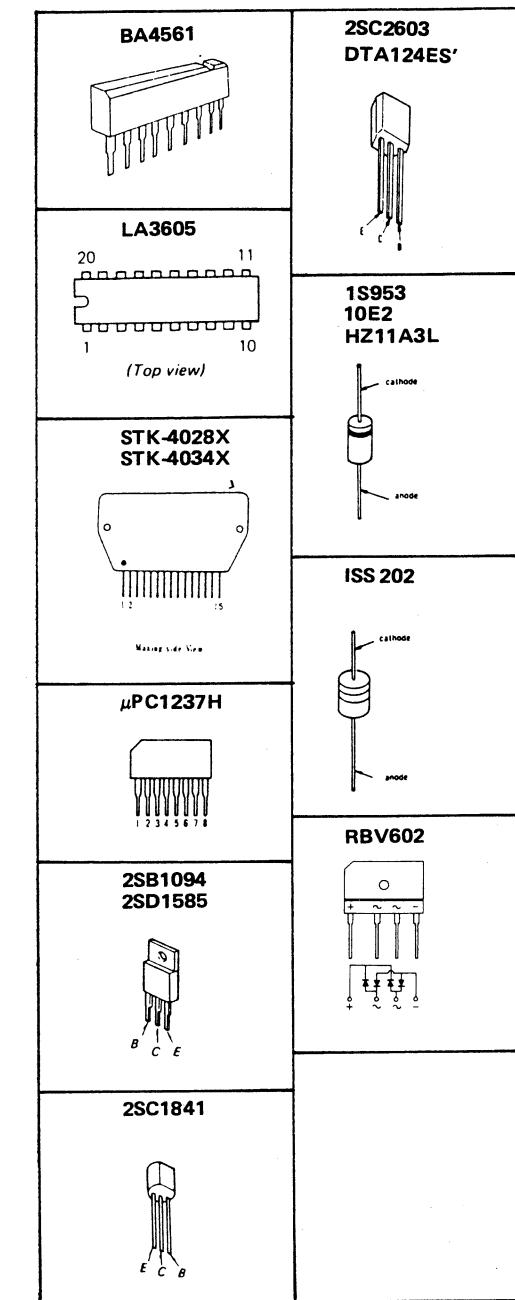
PHONO: For disc programs connected to PHONO inputs.

[10] VOLUME control

SECTION 1
BLOCK DIAGRAM



SEMICONDUCTORS



Note on Schematic Diagram.

- All capacitors are in μF unless otherwise noted. pF : $\mu\mu\text{F}$ 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.
- : signal path (FUNCTION PHONO)
— : signal path (GEQ ON)

Note: The components identified by shading and mark are critical for safety. Replace only with part number specified.

- Components for right channel have same values as for left channel. Reference numbers are coded from
- : nonflammable resistor.
- Switch**

Ref. No.	Switch	Position
S301	FUNCTION	PHONO
S401	EQ	ON

- : $\text{B}+$ bus.
- : $\text{B}-$ bus.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a VOM (50 $\text{k}\Omega/\text{V}$).

Note on Mounting Diagram

Note:

- Color code of sleeving over the end of the jacket.

WHT
RED
(RED)(GRY)
B

- : parts extracted from the component side.

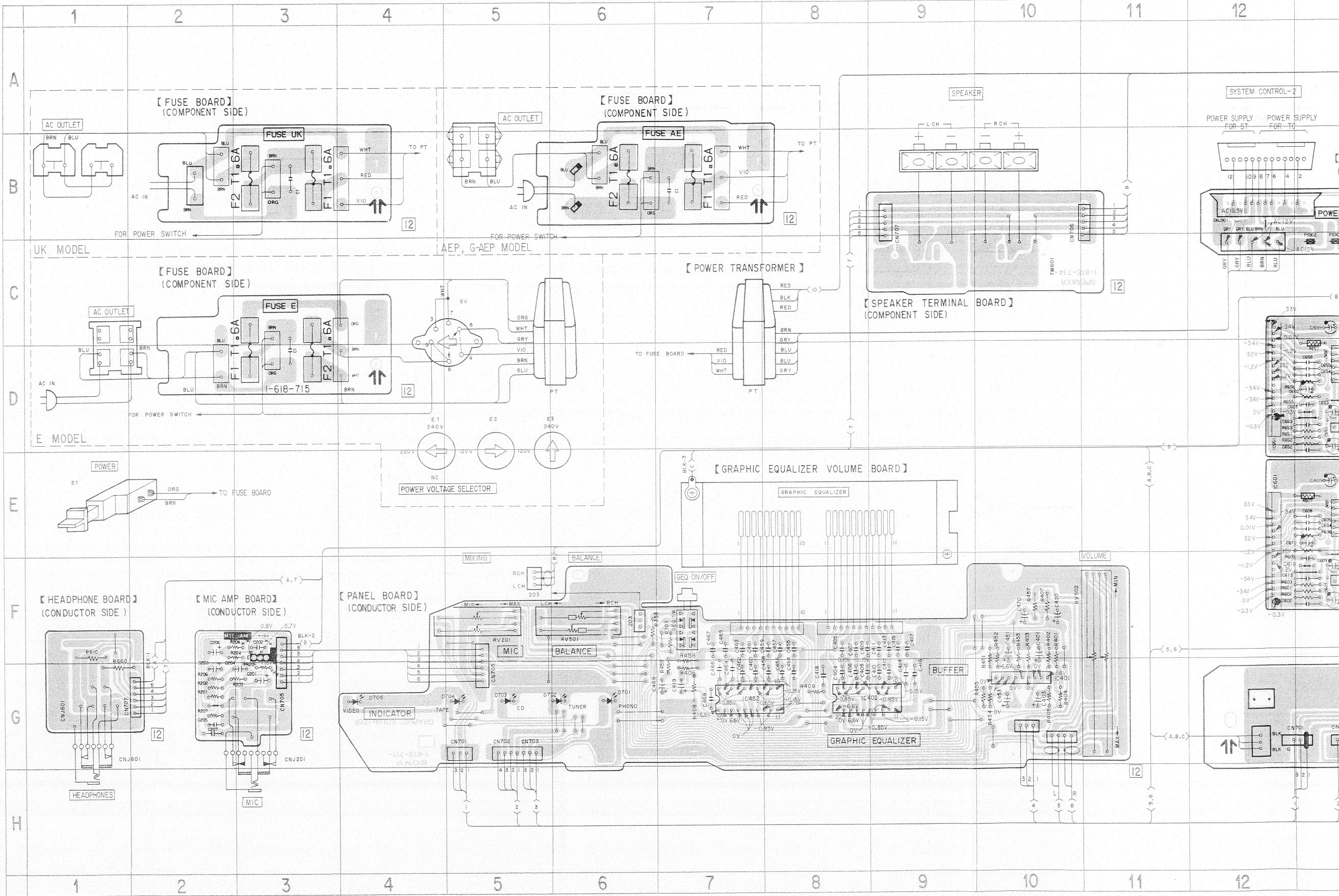
SECTION 2 DIAGRAMS

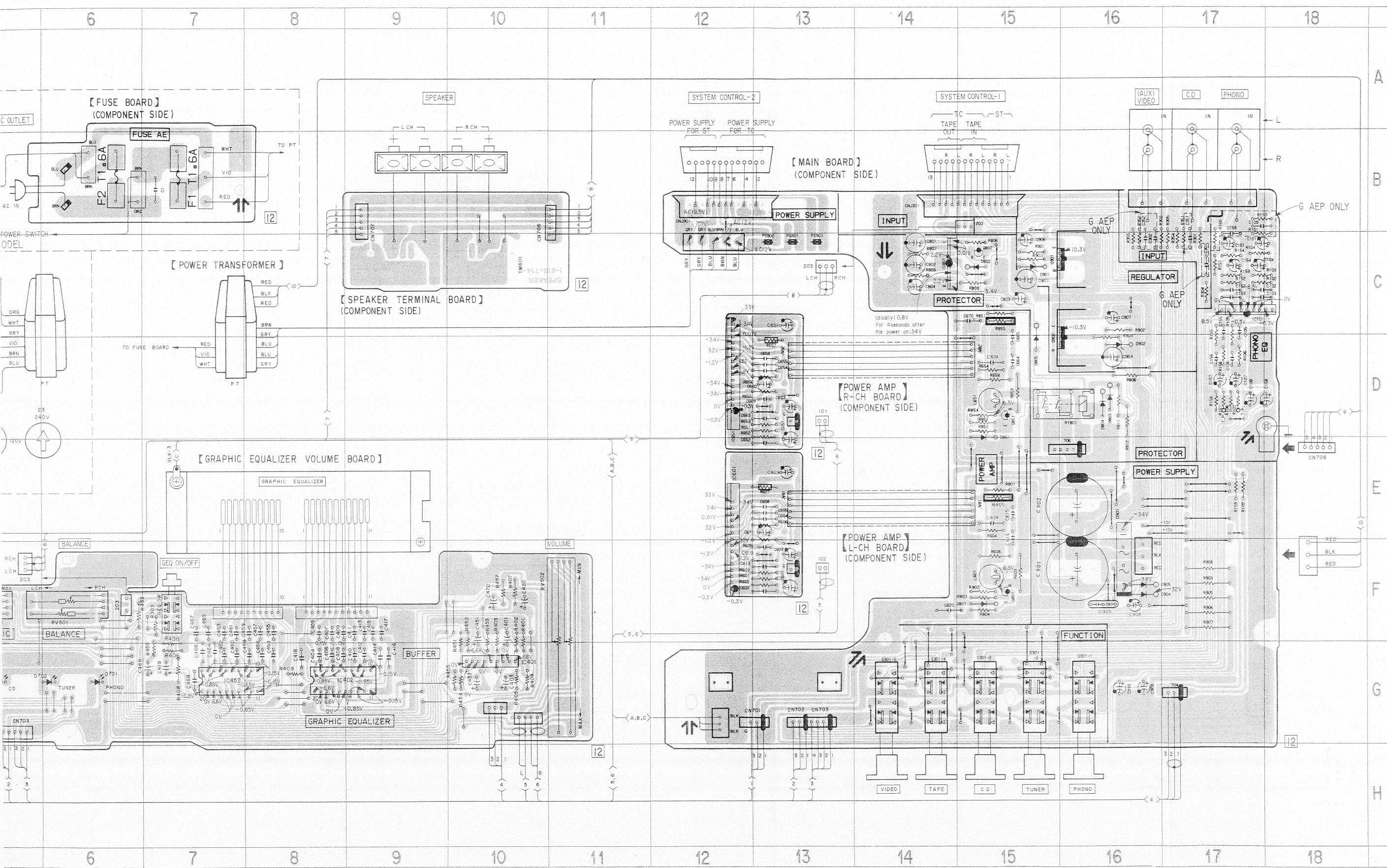
2-1. MOUNTING DIAGRAM — Conductor Side —

- Refer to page 5 for semiconductor lead layouts.
- Refer to page 5 for notes.

● SEMICONDUCTOR
LOCATION

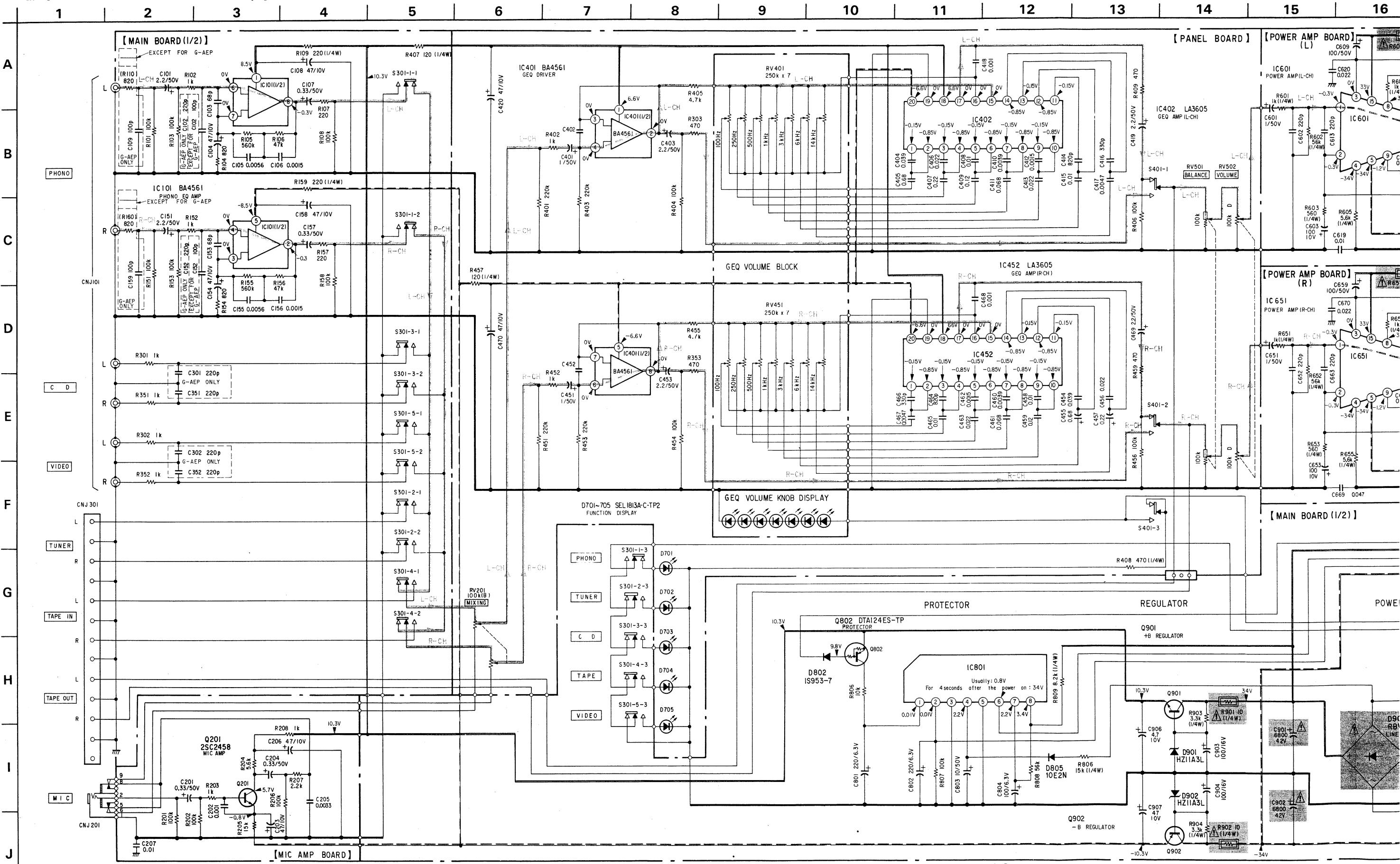
Ref. No.	Location
IC101	C-17
IC401	G-10
IC402	G-8
IC452	G-7
IC601	E-12
IC651	D-12
IC801	C-14
Q201	F-3
Q801	F-15
Q802	C-15
Q851	D-15
Q901	C-15
Q902	D-15
D701	G-6
D702	G-6
D703	G-5
D704	G-5
D705	G-4
D801	F-15
D802	C-15
D803	D-16
D804	D-16
D805	D-15
D851	D-15
D901	C-15
D902	D-16
D903	F-16
D904	F-16
D905	F-16

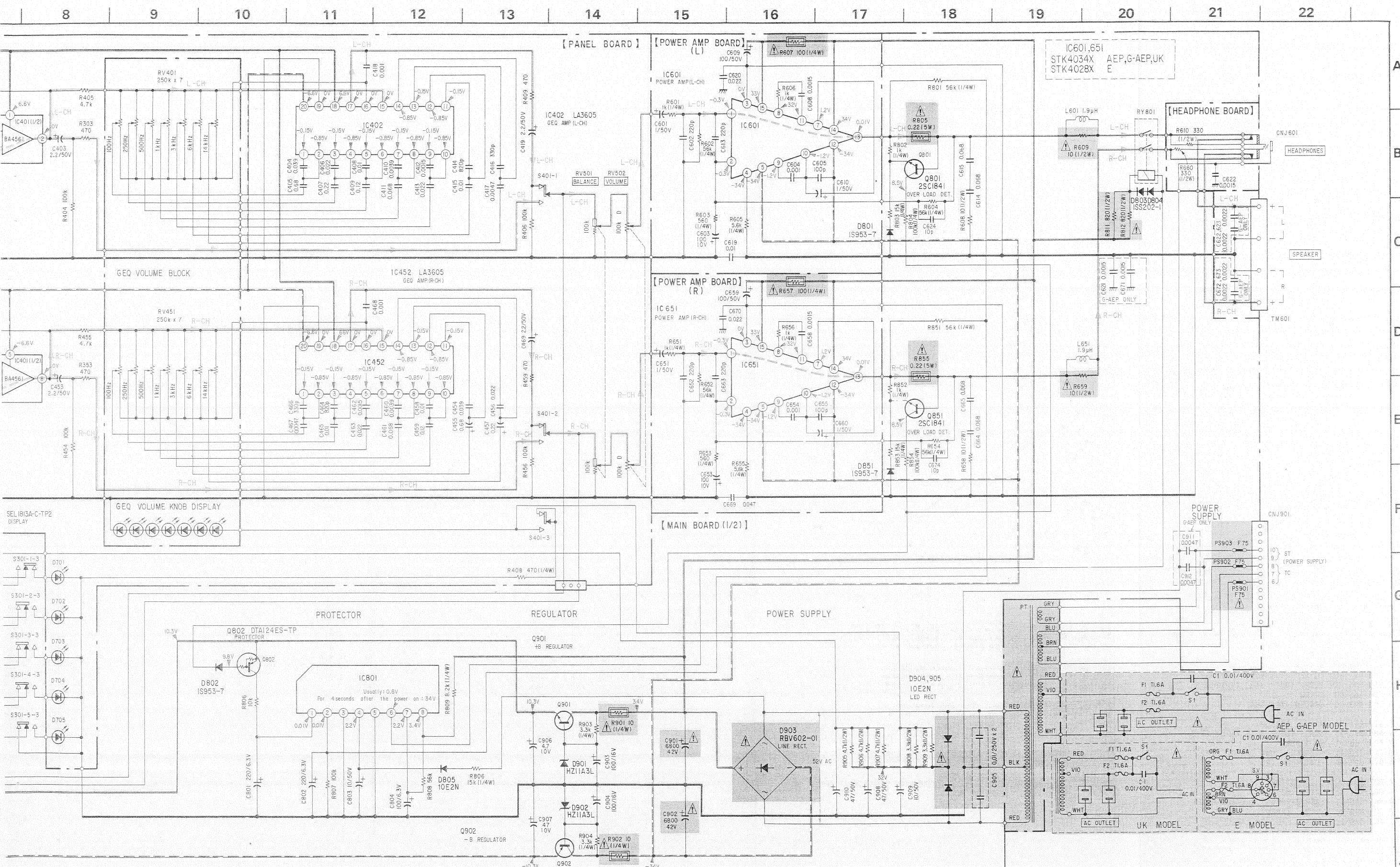




1-2. SCHEMATIC DIAGRAM • Refer to page 5 for notes.

- Refer to page 5 for notes.





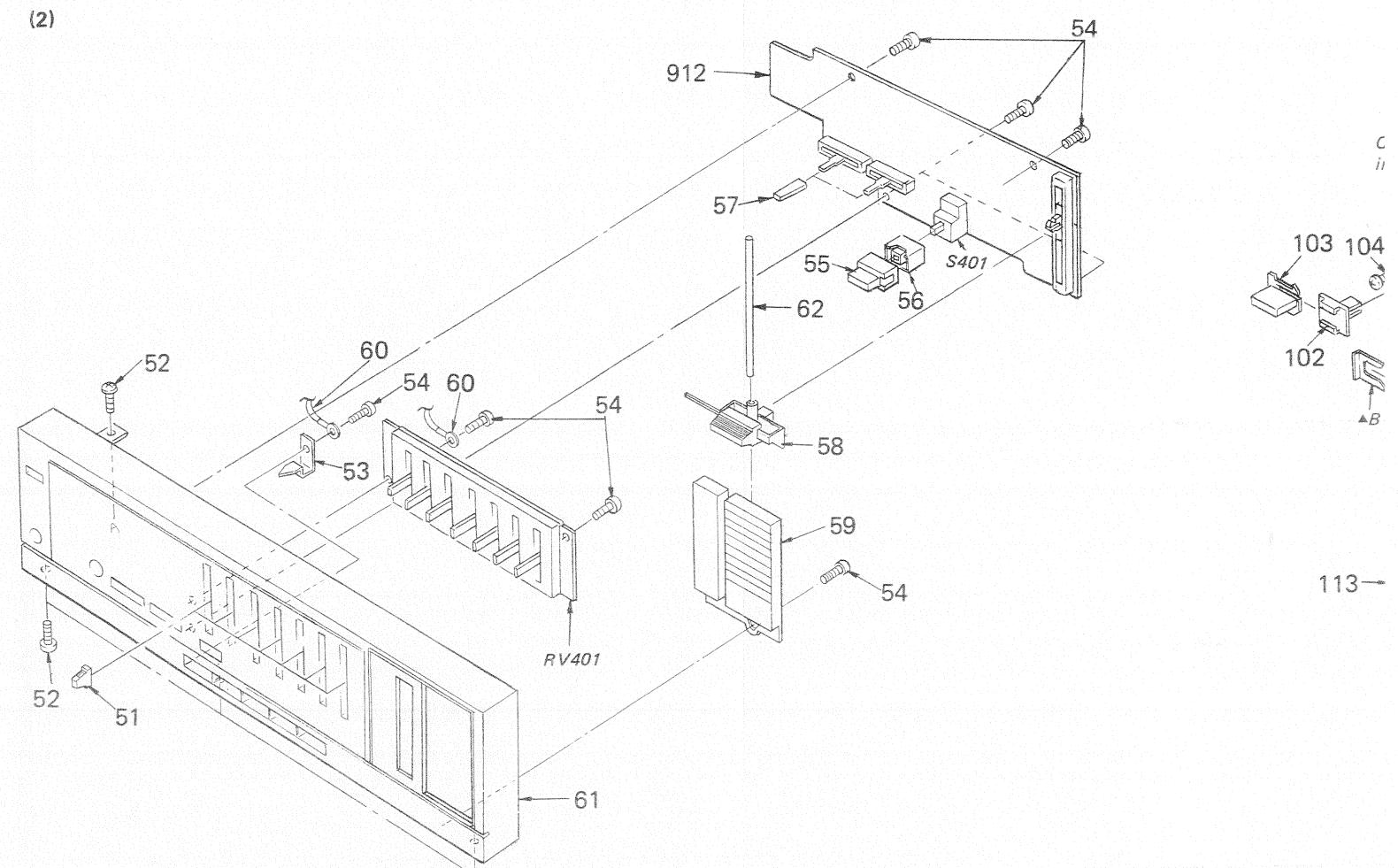
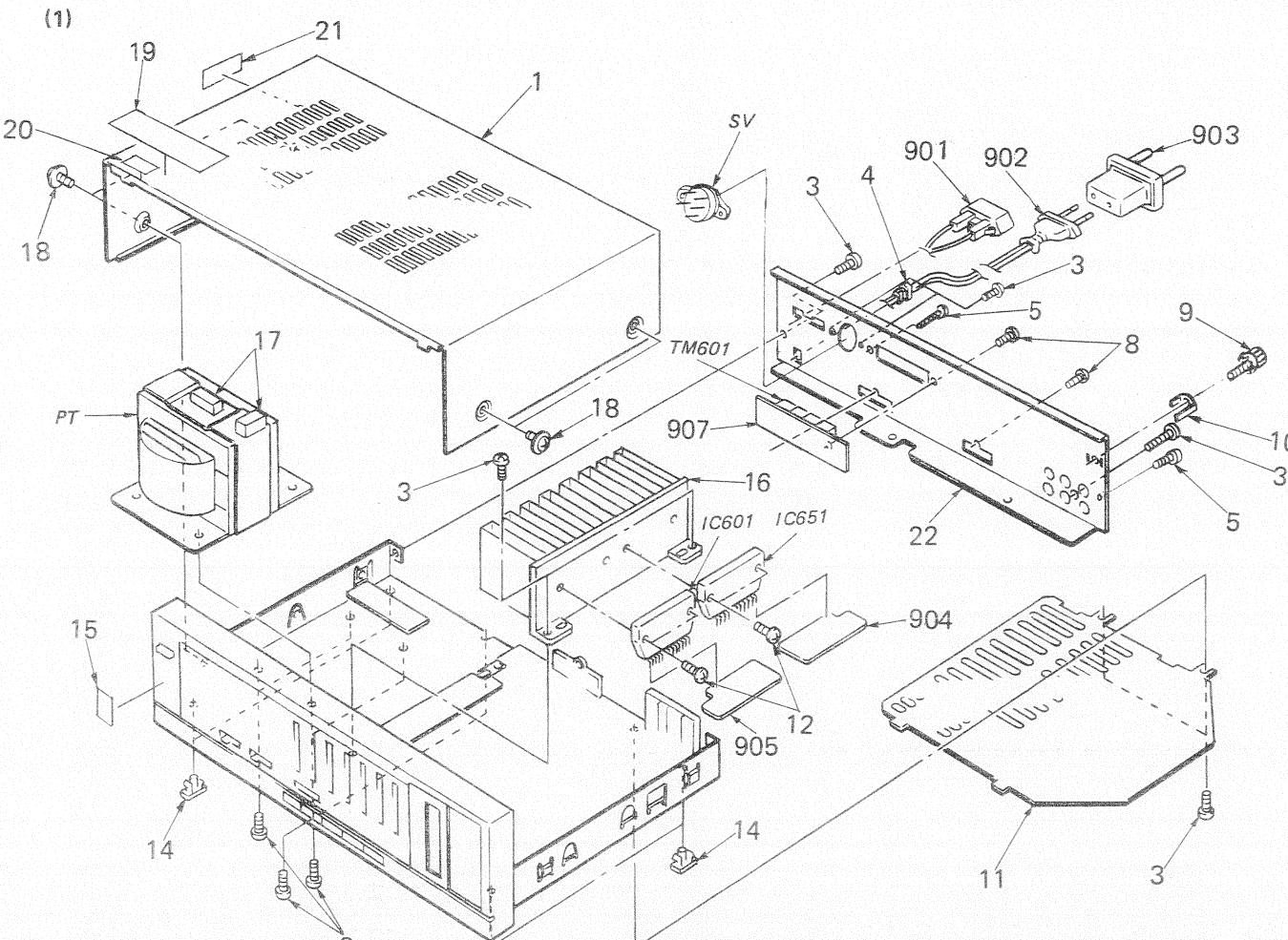
SECTION 3
EXPLODED VIEWS

NOTE:
The mechanical parts with no reference number in the exploded views are not supplied.

The construction parts of an assembled part are indicated with a callout number in the remark column.

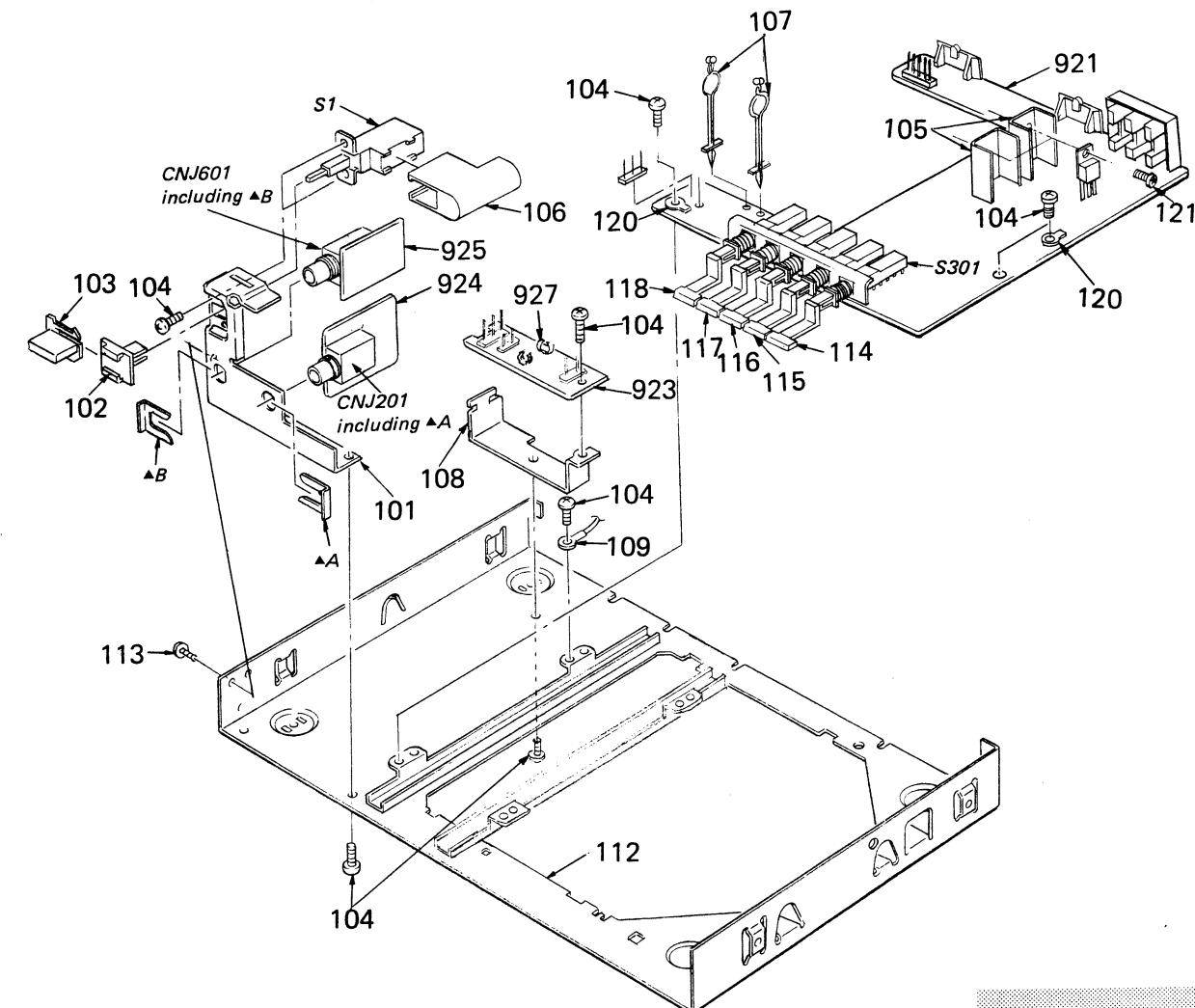
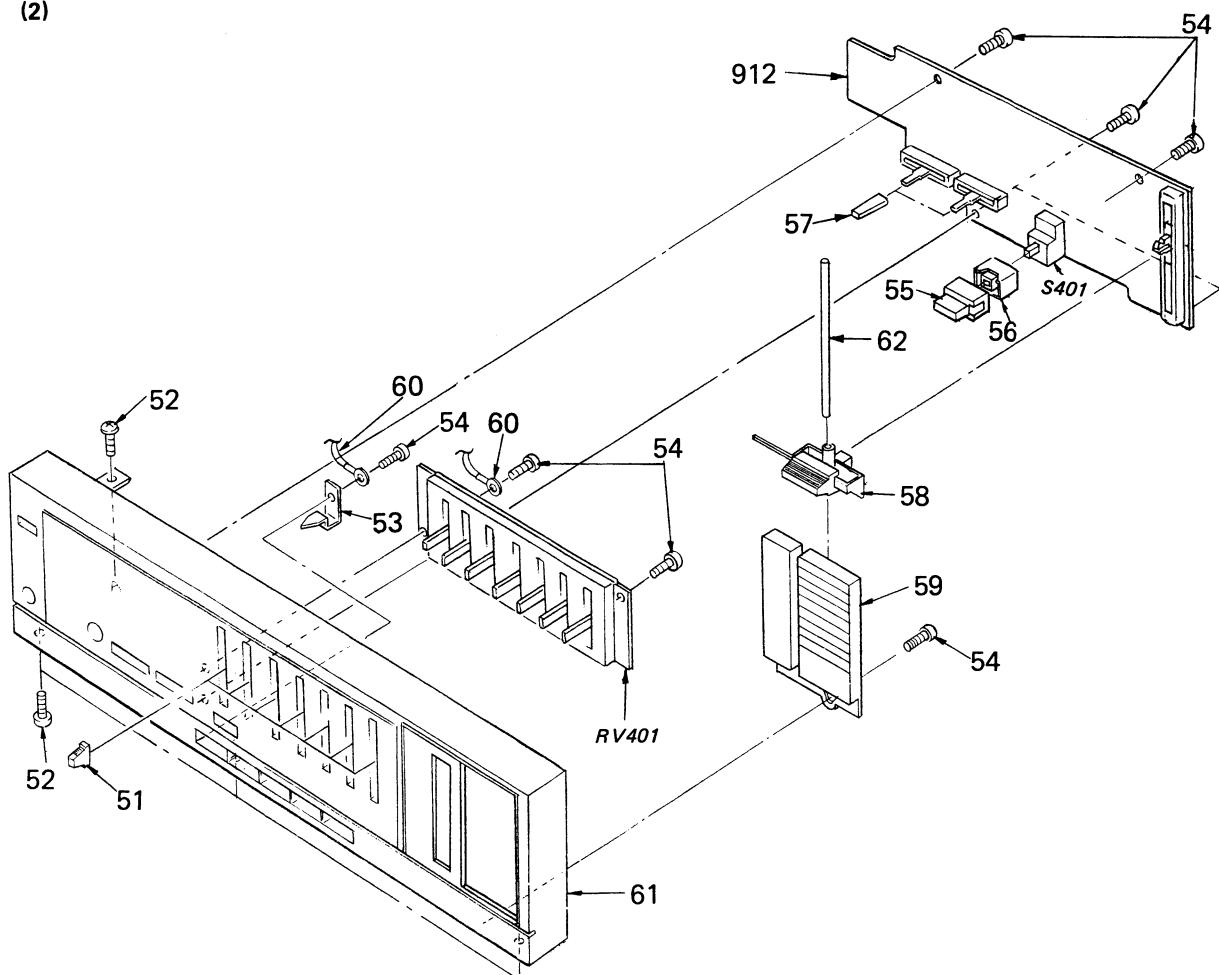
The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
1	4-914-029-01	(G-AEP,E,UK)...CASE		901	Δ.1-526-752-00 (E).....OUTLET, AC (2 GANG)		
	4-914-029-11	(AEP).....CASE			Δ.1-526-751-00 (UK).....OUTLET, AC		
3	7-685-752-04	SCREW +BVTT 3X8 (S)			Δ.1-526-794-11 (AEP,G-AEP).....OUTLET, AC		
4	3-703-244-00	BUSHING (2104), CORD		902	Δ.1-551-188-XX (E).....CORD, POWER		
5	3-703-473-00	(G-AEP)...SCREW, TERMINAL			Δ.1-534-817-XX (AEP,G-AEP)....CORD, POWER		
8	7-685-646-71	SCREW +BVTP 3X8 TYPE2 N-S			Δ.1-551-884-00 (UK).....CORD, POWER		
9	3-706-165-00	SCREW		903	Δ.1-526-565-00 (E)....AC PLUG ADAPTOR		
10	3-701-993-00	SPACER, TERMINAL		904	*1-618-717-11 PC BOARD, POWER IC (R)		
11	*4-912-117-21	PLATE, BOTTOM		905	*1-618-716-11 PC BOARD, POWER IC (L)		
12	7-685-650-71	SCREW +BVTP 3X16 TYPE2 IT-3		907	*1-618-714-11 PC BOARD, SPEAKER TERMINAL		
14	X-4907-603-1	FOOT ASSY		PT	Δ.1-448-483-11 (E).....TRANSFORMER, POWER		
15	3-703-710-41	STICKER, SONY SYMBOL (12)		PT	Δ.1-448-482-11 (AEP,G-AEP,UK)....TRANSFORMER, POWER		
16	*4-914-027-11	HEAT SINK (E)		SV	Δ1-526-576-51 (E).....SELECTOR, POWER VOLTAGE		
17	4-807-369-01	CUSHION (A)		TM601	1-536-705-21 TERMINAL BOARD (SP)		
18	4-886-821-01	SCREW, M3 CASE					
19	4-861-045-01	(AEP,G-AEP)...CAUTION LABEL					
20	3-701-690-01	(UK)...LABEL					
21	3-703-079-21	(UK)...CAUTION LABEL					
22	*4-914-033-01	(AEP)....PLATE (EXP), JACK					
	*4-914-033-11	(G-AEP)....PLATE (EXP), JACK					
	*4-914-033-21	(UK)....PLATE (EXP), JACK					
	*4-914-033-31	(E)....PLATE (EXP), JACK					

(2)



The components identified by shading and mark  are critical for safety. Replace only with part number specified.

No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
51	4-912-128-01	KNOB, SLIDE		59	4-914-026-11	PLATE, VOL	
52	7-685-871-01	SCREW +BVTT 3X6 (S)		60	7-623-508-01	LUG Ø3MM	
53	4-914-059-01	PLATE GROUND		61	X 4914-009-1	PANEL ASSY, FRONT	
54	7-685-646-71	SCREW +BVTP 3X8 TYPE2 N-S		62	*4-904-458-61	SHAFT	
55	3-318-909-81	KNOB, PUSH		912	*A-4358-172-A	MOUNTED PCB, GRAPHIC EQUALIZER	
56	4-864-307-00	RING		RV401	1-237-200-11	RES, VAR, SLIDE (BLOCK TYPE)	
57	4-902-815-11	KNOB, EQUALIZER		S401	1-570-632-11	SWITCH, PUSH (1 KEY)	
58	X 4914-009-1	KNOB ASSY, VOL					

No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
101	*4-914-016-01	BRACKET, SWITCH		117	4-914-039-31	KNOB (L), FUNCTION (TAPE)	
102	4-907-611-01	JOINT KNOB		118	4-914-039-41	KNOB (L), FUNCTION (VIDEO/AUX)	
103	4-875-466-00	KNOB POWER		120	4-870-539-00	PLATE, GROUND	
104	7-685-871-01	SCREW +BVTT 3X6 (S)		121	7-685-752-04	SCREW +BVTT 3X8 (S)	
105	*4-880-403-21	HEAT SINK		921	*A-4388-516-A	MOUNTED PCB, MAIN	
106	3-575-524-00	COVER, POWER SWITCH		923	*1-618-715-11	PC BOARD, FUSE	
107	*4-308-851-00	PURSE LOCK		924	*1-618-712-11	PC BOARD, MICROPHONE	
108	*4-902-812-01	HOLDER, FUSE PC BOARD		925	*1-618-713-11	PC BOARD, HEADPHONE	
109	7-623-508-01	LUG \triangleleft 3MM		927	1-533-183-11	HOLDER FUSE	
112	*X-4914-004-1	CHASSIS ASSY		CNJ201	1-563-347-11	JACK, LARGE TYPE	
113	7-682-545-04	SCREW +P 3X4		CNJ601	1-507-849-00	JACK, LARGE TYPE (HEADPHONES)	
114	4-914-039-01	KNOB (L), FUNCTION (PHONO)		S1	A-554-920-11	SWITCH, PUSH (AC POWER)(1 KEY)	
115	4-914-039-11	KNOB (L), FUNCTION (TUNER)		S301	1-570-614-11	SWITCH, PUSH (5 KEY)	
116	4-914-039-21	KNOB (L), FUNCTION (CD)					

SECTION 4

ELECTRICAL PARTS LIST

NOTE:

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF: μ F, PF: μ PF.

RESISTORS

- All resistors are in ohms.
- F : nonflammable

COILS

- MMH : mH, UH : μ H

SEMICONDUCTORS

In each case, U : μ , for example:
UA...: μ A..., UPA...: μ PA..., UPC...: μ PC,
UPD...: μ PD...

The components identified by shading and mark  are critical for safety. Replace only with part number specified.

ELECTRICAL PARTS

Ref.No.	Part No.	Description	Value	Rating	Ref.No.	Part No.	Description	Value	Rating
901	 1-526-752-00	(E).....OUTLET, AC (2 GANG)			C302	1-162-286-11	(G-AEP)....CERAMIC	220PF	10% 50V
	 1-526-751-00	(UK).....OUTLET, AC			C351	1-162-286-11	(G-AEP)....CERAMIC	220PF	10% 50V
	 1-526-794-11	(AEP,G-AEP)....OUTLET, AC			C352	1-162-286-11	(G-AEP)....CERAMIC	220PF	10% 50V
902	 1-551-188-XX	(E).....CORD, POWER			C401	1-123-611-00	ELECT	1MF	20% 50V
	 1-534-817-XX	(AEP,G-AEP)....CORD, POWER			C403	1-123-612-00	ELECT	2.2MF	20% 50V
	 1-551-884-00	(UK).....CORD, POWER			C404	1-136-160-00	FILM	0.039MF	5% 50V
903	 1-526-565-00	(E)....AC PLUG ADAPTOR			C405	1-123-902-00	ELECT	0.68MF	20% 50V
904	*1-618-717-11	PC BOARD, POWER IC (R)			C406	1-136-157-00	FILM	0.022MF	5% 50V
905	*1-618-716-11	PC BOARD, POWER IC (L)			C407	1-123-608-00	ELECT	0.22MF	20% 50V
907	*1-618-714-11	PC BOARD, SPEAKER TERMINAL			C408	1-136-153-00	FILM	0.01MF	5% 50V
912	*A-4358-172-A	MOUNTED PCB, GRAPHIC EQUALIZER			C409	1-136-166-00	FILM	0.12MF	5% 50V
921	*A-4388-516-A	MOUNTED PCB, MAIN			C410	1-130-478-00	MYLAR	0.0039MF	5% 50V
923	*1-618-715-11	PC BOARD, FUSE			C411	1-136-163-00	FILM	0.068MF	5% 50V
924	*1-618-712-11	PC BOARD, MICROPHONE			C412	1-130-473-00	MYLAR	0.0015MF	5% 50V
925	*1-618-713-11	PC BOARD, HEADPHONE			C413	1-136-157-00	FILM	0.022MF	5% 50V
927	1-533-183-11	HOLDER FUSE			C414	1-162-293-31	CERAMIC	820PF	10% 50V
 C1 1-161-744-00		CERAMIC	0.01MF	400V	C415	1-136-153-00	FILM	0.01MF	5% 50V
C101	1-123-612-00	ELECT	2.2MF	20% 50V	C416	1-162-288-31	CERAMIC	330PF	10% 50V
C102	1-162-282-31	(AEP,E,UK)....CERAMIC	100PF	10% 50V	C417	1-130-479-00	MYLAR	0.0047MF	5% 50V
C102	1-162-286-11	(G-AEP)....CERAMIC	220PF	10% 50V	C418	1-162-294-31	CERAMIC	0.001MF	10% 50V
C103	1-162-219-31	CERAMIC	68PF	5% 50V	C419	1-123-612-00	ELECT	2.2MF	20% 50V
C104	1-123-306-00	ELECT	47MF	20% 10V	C420	1-123-822-00	ELECT	47MF	20% 10V
C105	1-130-480-00	MYLAR	0.0056MF	5% 50V	C451	1-123-611-00	ELECT	1MF	20% 50V
C106	1-130-473-00	MYLAR	0.0015MF	5% 50V	C453	1-123-612-00	ELECT	2.2MF	20% 50V
C107	1-123-609-00	ELECT	0.33MF	20% 50V	C454	1-136-160-00	FILM	0.039MF	5% 50V
C108	1-123-306-00	ELECT	47MF	20% 10V	C455	1-123-902-00	ELECT	0.68MF	20% 50V
C109	1-162-282-31	(G-AEP)....CERAMIC	100PF	10% 50V	C456	1-136-157-00	FILM	0.022MF	5% 50V
C151	1-123-612-00	ELECT	2.2MF	20% 50V	C457	1-123-608-00	ELECT	0.22MF	20% 50V
C152	1-162-282-31	(AEP,E,UK)....CERAMIC	100PF	10% 50V	C458	1-136-153-00	FILM	0.01MF	5% 50V
C152	1-162-286-11	(G-AEP)....CERAMIC	220PF	10% 50V	C459	1-136-166-00	FILM	0.12MF	5% 50V
C153	1-162-219-31	CERAMIC	68PF	5% 50V	C460	1-130-478-00	MYLAR	0.0039MF	5% 50V
C154	1-123-306-00	ELECT	47MF	20% 10V	C461	1-136-163-00	FILM	0.068MF	5% 50V
C155	1-130-480-00	MYLAR	0.0056MF	5% 50V	C462	1-130-473-00	MYLAR	0.0015MF	5% 50V
C156	1-130-473-00	MYLAR	0.0015MF	5% 50V	C463	1-136-157-00	FILM	0.022MF	5% 50V
C157	1-123-609-00	ELECT	0.33MF	20% 50V	C464	1-162-293-31	CERAMIC	820PF	10% 50V
C158	1-123-306-00	ELECT	47MF	20% 10V	C465	1-136-153-00	FILM	0.01MF	5% 50V
C159	1-162-282-31	(G-AEP)....CERAMIC	100PF	10% 50V	C466	1-162-288-31	CERAMIC	330PF	10% 50V
C201	1-123-609-00	ELECT	0.33MF	20% 50V	C467	1-130-479-00	MYLAR	0.0047MF	5% 50V
C202	1-162-294-31	CERAMIC	0.001MF	10% 50V	C468	1-162-294-31	CERAMIC	0.001MF	10% 50V
C203	1-123-822-00	ELECT	47MF	20% 10V	C469	1-123-612-00	ELECT	2.2MF	20% 50V
C204	1-123-609-00	ELECT	0.33MF	20% 50V	C470	1-123-822-00	ELECT	47MF	20% 10V
C205	1-162-303-31	CERAMIC	0.0033MF	30% 16V	C601	1-123-380-00	ELECT	1MF	20% 50V
C206	1-123-822-00	ELECT	47MF	20% 10V	C602	1-161-315-00	CERAMIC	220PF	10% 50V
C207	1-162-306-31	CERAMIC	0.01MF	30% 16V	C603	1-124-443-00	ELECT	100MF	20% 10V
C301	1-162-286-11	(G-AEP)....CERAMIC	220PF	10% 50V	C604	1-161-323-00	CERAMIC	0.001MF	10% 50V

ELECTRICAL PARTS

Ref.No.	Part No.	Description	Value	Unit	Value	Unit
C605	1-161-271-00	CERAMIC	100PF	5%	50V	
C608	1-161-053-00	CERAMIC	0.0015MF	30%	50V	
C609	1-124-122-11	ELECT	100MF	20%	50V	
C610	1-123-380-00	ELECT	1MF	20%	50V	
C613	1-161-315-00	CERAMIC	220PF	10%	50V	
C614	1-136-163-00	MYLAR	0.068MF	10%	50V	
C615	1-136-163-00	MYLAR	0.068MF	10%	50V	
C616	1-162-301-31	CERAMIC	0.0015MF	30%	50V	
C619	1-130-483-00	MYLAR	0.01MF	5%	50V	
C620	1-161-494-00	CERAMIC	0.022MF	30%	25V	
C621	1-161-325-00	(G-AEP)...CERAMIC	0.0015MF	30%	50V	
C622	1-161-494-00	(G-AEP)...CERAMIC	0.022MF	30%	25V	
C623	1-161-494-00	(G-AEP)...CERAMIC	0.022MF	30%	25V	
C624	1-161-259-00	CERAMIC	10PF	5%	50V	
C651	1-123-380-00	ELECT	1MF	20%	50V	
C652	1-161-315-00	CERAMIC	220PF	10%	50V	
C653	1-124-443-00	ELECT	100MF	20%	10V	
C654	1-161-323-00	CERAMIC	0.001MF	10%	50V	
C655	1-161-271-00	CERAMIC	100PF	5%	50V	
C658	1-161-053-00	CERAMIC	0.0015MF	30%	50V	
C659	1-124-122-11	ELECT	100MF	20%	50V	
C660	1-123-380-00	ELECT	1MF	20%	50V	
C663	1-161-315-00	CERAMIC	220PF	10%	50V	
C664	1-136-163-00	MYLAR	0.068MF	10%	50V	
C665	1-136-163-00	MYLAR	0.068MF	10%	50V	
C669	1-130-483-00	MYLAR	0.01MF	5%	50V	
C670	1-161-494-00	CERAMIC	0.022MF	30%	25V	
C671	1-161-325-00	(G-AEP)...CERAMIC	0.0015MF	10%	50V	
C672	1-161-494-00	(G-AEP)...CERAMIC	0.022MF	30%	25V	
C673	1-161-494-00	(G-AEP)...CERAMIC	0.022MF	30%	25V	
C674	1-161-259-00	CERAMIC	10PF	5%	50V	
C801	1-123-308-00	ELECT	220MF	20%	6.3V	
C802	1-123-308-00	ELECT	220MF	20%	6.3V	
C803	1-123-356-00	ELECT	10MF	20%	50V	
C804	1-123-307-00	ELECT	100MF	20%	6.3V	
C901	Δ1-124-030-00	ELECT	6800MF	20%	42V	
C902	Δ1-124-030-00	ELECT	6800MF	20%	42V	
C903	1-123-333-00	ELECT	100MF	20%	16V	
C904	1-123-333-00	ELECT	100MF	20%	16V	
C905	Δ1-102-394-00	CERAMIC	0.01MF		250V	
C906	1-123-306-00	ELECT	47MF	20%	10V	
C907	1-123-306-00	ELECT	47MF	20%	10V	
C908	1-123-359-00	ELECT	47MF	20%	50V	
C909	1-123-356-00	ELECT	10MF	20%	50V	
C910	1-123-359-00	ELECT	47MF	20%	50V	
C911	1-161-328-11	(G-AEP)...CERAMIC	0.0047MF	30%	50V	
C912	1-161-328-11	(G-AEP)...CERAMIC	0.0047MF	30%	50V	
CN401	*1-563-251-11	SOCKET, CONNECTOR 12P				
CN451	*1-563-152-11	SOCKET, CONNECTOR 10P				
CNJ101	1-507-911-11	JACK, PIN 6P				
CNJ201	1-563-347-11	JACK, LARGE TYPE				
CNJ301	1-562-068-13	SOCKET, CONNECTOR 13P				
CNJ601	1-507-849-00	JACK, LARGE TYPE (HEADPHONES)				
CNJ901	1-562-068-13	SOCKET, CONNECTOR 13P				
D701	8-719-302-16	DIODE SEL1813A-C-TP2				
D702	8-719-302-16	DIODE SEL1813A-C-TP2				
D703	8-719-302-16	DIODE SEL1813A-C-TP2				

ELECTRICAL PARTS

Ref.No.	Part No.	Description	Value	Unit	Value	Unit
D704	8-719-302-16	DIODE SEL1813A-C-TP2				
D705	8-719-302-16	DIODE SEL1813A-C-TP2				
D801	8-719-107-57	DIODE 1S953-7				
D802	8-719-107-57	DIODE 1S953-7				
D803	8-719-107-94	DIODE 1SS202-1				
D804	8-719-107-94	DIODE 1SS202-1				
D805	8-719-200-77	DIODE 10E2-N				
D851	8-719-107-57	DIODE 1S953-7				
D901	7-719-910-13	DIODE HZ11A3L				
D902	7-719-910-13	DIODE HZ11A3L				
D903	Δ8-719-302-38	DIODE RBV-602-01				
D904	Δ8-719-200-77	DIODE 10E2-N				
D905	Δ8-719-200-77	DIODE 10E2-N				
F1	Δ1-532-259-00	FUSE, TIME-LAG T1.6A				
F2	Δ1-532-259-00	FUSE, TIME-LAG T1.6A				
IC101	8-759-923-97	IC BA4561				
IC401	8-759-923-97	IC BA4561				
IC402	8-759-802-54	IC LA3605				
IC452	8-759-802-54	IC LA3605				
IC601	8-749-900-12	(AEP,G-AEP,UK)...IC STK4034MK-10				
IC601	8-749-900-13	(E)...IC STK4028MK-10				
IC651	8-749-900-12	(AEP,G-AEP,UK)...IC STK4034MK-10				
IC651	8-749-900-13	(E)...IC STK4028MK-10				
IC801	8-759-101-23	IC UPC1237H				
J201	*1-562-249-00	SOCKET, CONNECTOR 4P				
J202	*1-562-249-00	SOCKET, CONNECTOR 4P				
J706	*1-562-250-00	SOCKET, CONNECTOR 5P				
J707	*1-562-251-00	SOCKET, CONNECTOR 6P				
J701	*1-562-327-00	SOCKET, CONNECTOR 3P				
J704	*1-562-327-00	SOCKET, CONNECTOR 3P				
J702	*1-562-328-00	SOCKET, CONNECTOR 7P				
J703	*1-562-328-00	SOCKET, CONNECTOR 7P				
J705	*1-562-328-00	SOCKET, CONNECTOR 7P				
L601	*1-420-872-00	COIL, AIR CORE 1.9UH				
L651	*1-420-872-00	COIL, AIR CORE 1.9UH				
PS901	Δ1-532-686-00	LINK, IC				
PS902	Δ1-532-686-00	LINK, IC				
PS903	Δ1-532-686-00	LINK, IC				
PT	Δ1-448-483-11	(E)...TRANSFORMER, POWER				
PT	Δ1-448-482-11	(AEP,G-AEP,UK)...TRANSFORMER, POWER				
Q201	8-729-606-33	TRANSISTOR 2SC2603F				
Q801	8-729-108-05	TRANSISTOR 2SC1841PA				
Q802	8-729-900-36	TRANSISTOR DTA124ES-DP				
Q851	8-729-108-05	TRANSISTOR 2SC1841PA				
Q901	8-729-107-25	TRANSISTOR 2SD1585-L				
Q902	8-729-111-67	TRANSISTOR 2SB1094-L				
R101	1-249-441-11	CARBON	100K	5%	1/6W	
R102	1-249-417-11	CARBON	1K	5%	1/6W	
R103	1-249-441-11	CARBON	100K	5%	1/6W	
R104	1-247-829-00	CARBON	820	5%	1/6W	
R105	1-247-897-00	CARBON	560K	5%	1/6W	
R106	1-249-437-11	CARBON	47K	5%	1/6W	
R107	1-247-815-00	CARBON	220	5%	1/6W	
R108	1-249-441-11	CARBON	100K	5%	1/6W	
R109	1-247-704-11	CARBON	220	5%	1/4W	
R110	1-247-829-81	(G-AEP)...CARBON	820	5%	1/6W	

The components identified by shading and mark **Δ** are critical for safety. Replace only with part number specified.

ELECTRICAL PARTS

Ref.No.	Part No.	Description	100K	5%	1/6W
R151	1-249-441-11	CARBON	1K	5%	1/6W
R152	1-249-417-11	CARBON	100K	5%	1/6W
R153	1-249-441-11	CARBON	820	5%	1/6W
R154	1-247-829-00	CARBON	560K	5%	1/6W
R155	1-247-897-00	CARBON	47K	5%	1/6W
R156	1-249-437-11	CARBON	220	5%	1/6W
R157	1-247-815-00	CARBON	100K	5%	1/6W
R158	1-249-441-11	CARBON	220	5%	1/4W
R159	1-247-704-11	CARBON	(G-AEP)...	820	5% 1/6W
R160	1-247-829-81	CARBON	5.6K	5%	1/6W
R201	1-249-441-11	CARBON	15K	5%	1/6W
R202	1-249-441-11	CARBON	100K	5%	1/6W
R203	1-249-417-11	CARBON	1K	5%	1/6W
R204	1-247-849-00	CARBON	100K	5%	1/6W
R205	1-247-859-00	CARBON	2.2K	5%	1/6W
R206	1-249-441-11	CARBON	1K	5%	1/6W
R207	1-249-421-11	CARBON	470	5%	1/6W
R208	1-249-417-11	CARBON	1K	5%	1/6W
R301	1-249-417-11	CARBON	1K	5%	1/6W
R302	1-249-417-11	CARBON	1K	5%	1/6W
R303	1-247-823-00	CARBON	470	5%	1/6W
R351	1-249-417-11	CARBON	1K	5%	1/6W
R352	1-249-417-11	CARBON	470	5%	1/6W
R353	1-247-823-00	CARBON	220K	5%	1/6W
R401	1-247-887-00	CARBON	1K	5%	1/6W
R402	1-249-417-11	CARBON	220K	5%	1/6W
R403	1-247-887-00	CARBON	100K	5%	1/6W
R404	1-249-441-11	CARBON	4.7K	5%	1/6W
R405	1-249-425-11	CARBON	100K	5%	1/6W
R406	1-249-441-11	CARBON	120	5%	1/4W
R407	1-247-109-00	CARBON	220K	5%	1/6W
R408	1-247-708-11	CARBON	470	5%	1/4W
R409	1-247-823-00	CARBON	470	5%	1/6W
R451	1-247-887-00	CARBON	220K	5%	1/6W
R452	1-249-417-11	CARBON	1K	5%	1/6W
R453	1-247-887-00	CARBON	220K	5%	1/6W
R454	1-249-441-11	CARBON	100K	5%	1/6W
R455	1-249-425-11	CARBON	4.7K	5%	1/6W
R456	1-249-441-11	CARBON	100K	5%	1/6W
R457	1-247-109-00	CARBON	120	5%	1/4W
R459	1-247-823-00	CARBON	470	5%	1/6W
R601	1-247-713-11	CARBON	1K	5%	1/4W
R602	1-247-173-00	CARBON	56K	5%	1/4W
R603	1-247-125-00	CARBON	560	5%	1/4W
R604	1-247-173-00	CARBON	56K	5%	1/4W
R605	1-247-149-00	CARBON	5.6K	5%	1/4W
R606	1-247-713-11	CARBON	1K	5%	1/4W
R607	1-247-700-11	CARBON	100	5%	1/4W F
R608	1-247-192-00	CARBON	10	5%	1/2W
R609	1-247-192-00	CARBON	10	5%	1/2W F
R651	1-247-713-11	CARBON	1K	5%	1/4W
R652	1-247-173-00	CARBON	56K	5%	1/4W
R653	1-247-125-00	CARBON	560	5%	1/4W
R654	1-247-173-00	CARBON	56K	5%	1/4W
R655	1-247-149-00	CARBON	5.6K	5%	1/4W
R656	1-247-713-11	CARBON	1K	5%	1/4W
R657	1-247-700-11	CARBON	100	5%	1/4W F
R658	1-247-192-00	CARBON	10	5%	1/2W

ELECTRICAL PARTS

Ref.No.	Part No.	Description	10	5%	1/2W F
R801	1-247-173-00	CARBON	56K	5%	1/4W
R802	1-247-713-11	CARBON	1K	5%	1/4W
R803	1-249-460-11	CARBON	15K	5%	1/4W
R804	1-249-469-11	CARBON	100K	5%	1/4W
R805	1-217-156-00	RES, METAL PLATE	0.22	5W	F
R806	1-249-429-11	CARBON	10K	5%	1/6W
R807	1-249-441-11	CARBON	100K	5%	1/6W
R808	1-247-873-00	CARBON	56K	5%	1/6W
R809	1-247-153-00	CARBON	8.2K	5%	1/4W
R810	1-249-460-11	CARBON	15K	5%	1/4W
R811	1-247-751-11	CARBON	820	5%	1/2W
R812	1-247-751-11	CARBON	820	5%	1/2W
R851	1-247-173-00	CARBON	56K	5%	1/4W
R852	1-247-713-11	CARBON	1K	5%	1/4W
R853	1-249-460-11	CARBON	15K	5%	1/4W
R854	1-249-469-11	CARBON	100K	5%	1/4W
R855	1-217-156-00	RES, METAL PLATE	0.22	5W	F
R901	1-217-387-00	FUSIBLE	10	5%	1/4W F
R902	1-217-387-00	FUSIBLE	10	5%	1/4W F
R903	1-247-719-11	CARBON	3.3K	5%	1/4W
R904	1-247-719-11	CARBON	3.3K	5%	1/4W
R905	1-247-256-00	CARBON	4.7K	5%	1/2W
R906	1-247-256-00	CARBON	4.7K	5%	1/2W
R907	1-247-256-00	CARBON	4.7K	5%	1/2W
R908	1-247-252-00	CARBON	3.3K	5%	1/2W
R909	1-247-252-00	CARBON	3.3K	5%	1/2W
RV201	1-230-732-11	RES, VAR, SLIDE	100K/100K	(MIC MIXING)	
RV401	1-237-200-11	RES, VAR, SLIDE	(BLOCK TYPE)		
RV501	1-237-201-11	RES, VAR, SLIDE	100K/100K	(BALENC)	
RV502	1-237-162-11	RES, VAR, SLIDE	100K/100K	(VOLUME)	
RY801	1-515-501-00	RELAY			
S1	1-554-920-11	SWITCH, PUSH (AC POWER)	(1 KEY)		
S301	1-570-614-11	SWITCH, PUSH	(5 KEY)		
S401	1-570-632-11	SWITCH, PUSH	(1 KEY)		
SV	1-526-576-51	(E).....	SELECTOR, POWER VOLTAGE		
TM601	1-536-705-21	TERMINAL BOARD (SP)			

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